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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/444,541	11/22/1999	PAUL R. GAGON	BBE1199CIP	8794

7590 01/15/2004
FOLEY & LARDNER
2029 CENTURY PARK EAST
SUITE 3500
LOS ANGELES, CA 90067-3000

EXAMINER

LEE, PING

ART UNIT	PAPER NUMBER
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2644

8

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/444,541

Applicant(s)

GAGON, PAUL R.

Examiner

Ping Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species 2 shown in Figs. 3 and 4 in Paper No. 6 is acknowledged.
2. Claims 19-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6. It is noticed that the claimed features in claims 19-24 do not read on Figs. 3 and 4.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohn (US 4,891,841) in view of Gagon (US 5,736,897).

Regarding claims 18, 11-14, Bohn shows the all pass phase inverter (80), a band pass filter having a predetermined Q (45) and a summing amplifier (35). Bohn fails to show the input buffer and fails to explicitly the sound source. Gagon teaches an input buffer with state-variable filter for providing buffering, compensation for high, mid and low frequencies separately and automatic balancing of the mid and high frequency signals. This input buffer could be used for receiving the signal from a tape player and

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compensating the bandwidth imposed by the dynamic range of the tape. Thus, it would have been obvious to one of ordinary skill in the art to modify Bohn's system by incorporating the input buffer as taught in Gagon in order to modify and improve the dynamic range of the signal from a tape player.

Regarding claims 15-17, Bohn fails to show the power amplifier and the speaker means. However, Bohn teaches that the equalizer is used for processing the audio signal. It was well known in the art to generate acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been obvious to one of ordinary skill in the art to generate the sound using well known speaker means and power amplifier connected to the signal generated by Bohn's system in view of Gagon in order to have an equalizer compensating the signal from a narrow dynamic range, such as the one from a tape player.

5. Claims 11-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagon (US 5,736,897) in view of Bohn (US 4,891,841).

Regarding claims 18, 11-14, Gagon shows the structure of the state-variable filter input buffer, but fails to show the all pass phase inverter (80), a band pass filter having a predetermined Q (45) and a summing amplifier (35). Bohn teaches an equalizer using such components to provide independent and smooth band equalizing. Thus, it would have been obvious to one of ordinary skill in the art to modify Gagon's system by using the equalizer as taught in Bohn to further improve the signal response with smooth band equalizing.

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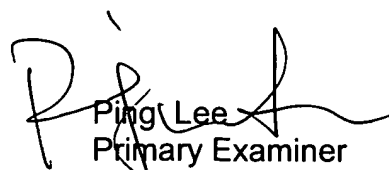
Regarding claims 15-17, neither Gagon nor Bohn shows the power amplifier and the speaker means. However, both Gagon and Bohn teach that the device is used for processing the audio signal. It was well known in the art to generate acoustic sound by using a speaker means connected to an equalizer and a power amplifier. Thus, it would have been obvious to one of ordinary skill in the art to generate the sound using well known speaker means and power amplifier connected to the signal generated by Gagon's system in view of Bohn in order to generate an improved sound signal from a source with a narrow dynamic range, such as the one from a tape player.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865.

The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.


Ping Lee
Primary Examiner
Art Unit 2644

pwl
January 9, 2004